Maximum Permissive Exposure

FCC ID: BJM-IOT3352
Product Name: IOT Gateway
Model No: IOT-3352

1. According to FCC CFR 47 §1.1310, the criteria listed in the following table shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b).

Table 1 Limits for Maximum Permissible Exposure

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Average Time (Minutes)
(A) Limits For Occupational / Control Exposures (f = frequency)				
30-300	61.4	0.163	1.0	6
300-1500	…	…	f/300	6
1500-100,000	…	…	5.0	6
(B) Limits For General Population / Uncontrolled Exposure (f = frequency)				
30-300	27.5	0.073	0.2	30
300-1500	…	…	f/1500	30
1500-100,000	…	…	1.0	30

2. MPE Calculation

Tatung Company declares that the product described above has been evaluated and found to comply with the RF exposure limits for humans, as specified based on ANSI/FCC recommendation.

RF Exposure Calculations:
$S = (P * G) / (4* \pi * r^2)$ or $r = \sqrt{(P * G) / (4 * \pi * S)}$

2.1 WIFI 2.4G MPE

Where :

Based on safety distance (r)=	20	cm		
Highest Power Output (P)=	23.04	dBm =	**201.372**	mW
Antenna Gain (G)=	2.2	dBi =	**1.660**	Numerical
MPE (S) = (P*G) / (4*π*r^2) =	= (201.372*1.660)/(4*π*20^2)=		**0.066502**	mW/cm^2

Based on safety distance (r) **20cm**, the antenna gain (G) is **1.660 Numerical,** and the highest power output (P) is **201.372mW**, the power density (S) is **0.066502mW/cm^2.**

2.2 BT MPE

Where :

Based on safety distance (r)=	20	cm		
Highest Power Output (P)=	5.699	dBm =	**3.714**	mW
Antenna Gain (G)=	2.2	dBi =	**1.660**	Numerical
MPE (S) = (P*G) / (4*π*r^2) =	**= (3.714*1.660)/(4*π*20^2)=**		**0.001227**	mW/cm^2

Based on safety distance (r) **20cm**, the antenna gain (G) is **1.660 Numerical,** and the highest power output (P) is **3.714mW**, the power density (S) is **0.001227mW/cm$^{2.}$**

Sincerely Yours,

_____
Mr. Ben Cheng
Manager
AUDIX Technology Corporation